

## ABSTRACT OF THE DISCLOSURE

An electromagnetic selection device of a two-stage planetary gear set (1) having one input shaft (2) and one output shaft (3), one sun gear (8), one ring gear (11), one planet carrier (10) with planetary gears (9), one transmission housing (6) and one sliding sleeve (14) for switching one first gear in which the ring gear (11) can be coupled with the housing (6) and one second gear in which the ring gear (11) can be coupled with the sun gear (8), the sliding sleeve (14) being movable by way of one electromagnet consisting of magnet coils (22, 23) and one armature (24). It is proposed that the armature (24) be situated rotatably, but axially fixed, upon the sliding sleeve (14).